

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
South Central Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

J. M. Huber Corporation - Crystal Hill, VA
Route 3, Highway 26 Crystal Hill, Virginia 24539
UTM Coordinates are ZONE: 17 EASTING: 251.3 km NORTHING: 4073.4 km
Permit No. VA-30905

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, J. M. Huber Corporation has applied for a Title V Operating Permit for its Crystal Hill, VA facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

FACILITY INFORMATION

Permittee

J. M. Huber Corporation
Highway 626, Route 3
P.O. Box 38
Crystal Hill, VA 24539

Facility

J. M. Huber Corporation - Crystal Hill, VA
Chaney Lane - Highway 626, Route 3,
Halifax County

AIRS ID No. 51-083-0050

SOURCE DESCRIPTION

J.M. Huber Corporation - Crystal Hill, VA is a manufacturer of Oriented Strandboard (OSB) covered by Standard Industrial Classification (SIC) Code 2493. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The facility is permitted to manufacture 522×10^6 square feet per year of finished OSB. Each rated square foot is based on a panel thickness of 3/8 inches.

This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility was previously permitted under a Minor NSR dated August 15, 1997, as amended May 14, 1998, and January 12, 2000, a Minor NSR dated January 23, 2002, and a Minor NSR dated May 9, 2002.

COMPLIANCE STATUS

The facility is inspected once per year. As of February 3, 2003, J. M. Huber Corporation - Crystal Hill, VA was in compliance with all procedural requirements and there are no outstanding Consent Orders or Notices of Violation.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity* (Notes 1 & 2)	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
WY	S4	Wood yard (PS&E Log Handling line) & (2) Waferizers	84,291 OD lbs/hr output & 71,902 OD lbs/hr output, combined	---	---	PM	Note 3
ES&D	S1A & S1B	Wellons Energy System including a 40 MMBtu/hr Wood Fired Thermal Oil Heat Exchanger & (4) MEC 1360 TNF/G triple pass rotary dryers	240 MMBtu/hr & 101,200 OD lb/hr output	For each stack, (2) parallel Geoenergy WESPs in series with (1) Smith Engineering RTO	DC1A, DC1B, RTO-1, & DC1C, DC1D, RTO-2	Products of Wood Combustion plus Additional PM and VOC from Process	Note 3
GB	S6	Natural Gas Fired Backup Thermal Oil Heater	40 MMBtu/hr	---	---	Products of Natural Gas Combustion	Note 3
BF	S2	Blending & PS&E Forming line	63,541 OD lb/hr output	MAC 144MCF572 fabric filter	DC2B	PM	Note 3
P	S5	Siempelkamp 8' x 24' x 14 opening Press	59,600 ft ² /hr (3/8" basis)	Durr Environmental 5-can RTO	RTO-3	PM & VOC	Note 3
FSS	S3	Finish Sawing & Sanding (Globe Finishing line)	59,600 OD lb/hr output	MAC 144MCF494 fabric filter	DC3C	PM	Note 3
DC4C	S4	Unresinated Dust Handling System	71,000 acfm	MAC 144MCF572 fabric filter	DC4C	PM	Note 3
SA2	S7	Six Head Sander	175 ft/min	MAC 144MCF572 fabric filter	DC5	PM	January 23, 2002

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity* (Notes 1 & 2)	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
IA	IA	Brand Name Logo and Nail Mark Application System	Thirty (30) 4'x 8' panels per minute	---	---	VOC	May 9, 2002
T2(a-d)	---	(4) Liquid Resin Storage Tanks	10,000 gal, each	Carbon Bed Absorber	---	VOC including Formaldehyde	Note 3
T1a, T1b	---	(2) Wax tanks	25,500 gal, each	---	---	---	Note 3
T3	---	Thermal Oil tank	12,000 gal	---	---	---	Note 3
T4	---	Hydraulic Oil 68 tank	15,900 gal	---	---	---	Note 3

Notes:

1. The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.
2. OD = Oven Dry
3. Permit date: 8/15/97, as amended 5/14/98 and 1/12/00

EMISSIONS SUMMARY

PLANTWIDE EMISSIONS SUMMARY (TONS PER YEAR)		
CRITERIA POLLUTANTS	POTENTIAL EMISSIONS	2001 Actual EMISSIONS
Particulate Matter (PM10)	143.1	113.2
Nitrogen Oxides (NO _x)	147.8	130.6
Volatile Organic Compounds (VOC)	105.2	115.9

TITLE V PROGRAM APPLICABILITY BASIS

This facility has the potential to emit 143.1 tons per year of PM10, 147.8 tons per year of NO_x, and 105.2 tons per year of VOC. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, J.M. Huber Corporation - Crystal Hill, VA is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 9 VAC 5 Chapter 80 Article 1.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit WY - Wood Yard)

Limitations

Particulate matter emissions are expected from the operation of the wood yard. Wood yard operations are defined as sawing, debarking, and material handling of wood feed stock and storage of energy system fuels. Particulate matter emissions are limited to the following:

Particulate Matter	6.14 lbs/hr	26.88 tons/yr
PM-10	6.14 lbs/hr	26.88 tons/yr

The opacity limit for the Wood Yard (WY) is 10% or less which is the opacity limit for all fugitive particulate matter emission sources at this facility.

Monitoring

The permittee is required to observe the wood yard operation on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the wood yard operation resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- b. Results of weekly or monthly opacity observations of the wood yard operation (WY), along with details regarding any necessary corrective actions.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit ES & D - Energy System and Dryers)

Limitations

Particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, VOC, formaldehyde, and phenol emissions are expected from the operation of the energy system and dryers (ES & D). ES & D is comprised of a wood fired energy system and four (4) rotary dryers. The following emission limits apply:

	<u>lbs/10⁶ Btu</u>	<u>lbs/hr</u>	<u>tons/yr</u>
Particulate Matter (filterable)	0.03 (40 CFR 60 Subpart Dc)	6.42	28.1
PM-10 (filterable)	0.03	6.42	28.1
Sulfur Dioxide	---	5.33	23.4
Nitrogen Oxides (as NO ₂)	---	25.73	112.7
Carbon Monoxide	---	8.93	39.1
Volatile Organic Compounds	---	13.70	60.0
Formaldehyde	---	0.14	0.61
Phenol	---	0.26	1.15

The energy system and dryers (ES & D) are controlled by primary control systems. The definition of the "primary control systems" as two (2) Wet Electrostatic Precipitators (WESPs) connected in

parallel to a single Regenerative Thermal Oxidizer (RTO) was in Condition 20.a. of the preconstruction permit for the facility. Condition 20.a is not included in current T5 since the applicable requirements from that condition have been completed. Therefore, this definition is relocated to Condition IV.A.1 of the current Title V permit for clarity.

The PM, NO_x, CO, VOC, formaldehyde, and phenol emission limits for the energy system and dryers (ES & D) are based on emission factors derived from stack testing at the Huber facility in Crystal Hill, Va. These factors are applied to the emission unit operating at capacity. The particulate matter emission limit generated through this testing is 0.03 lb/MMBtu which is substantially less than the maximum allowable limit provided in NSPS Subpart Dc (0.1 lb PM/MMBtu).

The compliance with the permitted control efficiencies for the PM and VOC for the primary control systems was confirmed by testing required in the permit to construct the facility. The margin of compliance for both was substantial (ie., for PM, 98.6% (test result) – 91% (allowable) and for VOC, 99.17% (test result) – 94% (allowable)).

The SO₂ emission limits for the energy system and dryers (ES & D) are based on the most conservative current emission factor from AP-42, and the factor is applied to the emission units operating at capacity.

Visible emissions from each primary control system shall not exceed 10 percent opacity.

The energy system and dryer (ES & D) is subject to the following operational limitations:

- a. The control efficiency of the primary control systems for particulate matter shall be a minimum of 91 percent.
- b. The control efficiency of the primary control systems for VOC shall be a minimum of 94 percent.
- c. The combustion chamber temperature for RTO's #1 and #2 shall be a minimum of 1500 °F.
- d. The approved fuels for the wood fired energy system are on-site generated wood, purchased wood, and on-site generated wastes as defined in Condition IV.A.3 of the Title V permit.

The energy system and dryer (ES & D) is subject to the following throughput limitations:

- a. The wood fired energy system (ES) shall consume no more than 233,600 tons per year of wood, 12 tons per year of waste edge seal, 5 tons per year of wax spillage, 25 tons per year of resin spillage, 365 tons per year of paper products, 1.94x10⁶ gallons per year of WESP blowdown, and 5,000 gallons per year of hydraulic and hot oil wastes, each calculated monthly as the sum of each consecutive twelve (12) month period.
- b. The annual throughput of the oven dried flakes shall not exceed 433,960 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period.

Monitoring

The permittee is required to continuously measure and record the following operating parameters:

- a. Primary and secondary current and voltage (by field) for each WESP.
- b. The combustion chamber temperature of each RTO.

The permittee is also required to operate continuous emission monitors (CEM) on the outlet of each primary control system. The CEMs data is used in lieu of the weekly opacity observations to show compliance with the opacity limit.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The daily and yearly consumption by the wood-fired energy system of wood, waste edge sealant, wax spillage, resin spillage, paper products, each in units of tons, and the daily and yearly consumption of WESP blowdown, and hydraulic and hot oil wastes, each in units of gallons. Each of these yearly consumption rates shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- b. The yearly throughput of the flake dryers, in units of oven dried tons per year, calculated monthly as the sum of each consecutive twelve (12) month period.
- c. Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the energy system; any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.
- d. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- e. Copies of primary and secondary current and voltage monitoring records for each WESP.
- f. Copies of combustion chamber temperature monitoring records for each RTO.
- g. Copies of semiannual excess emission reports required in Condition IV.B.3.
- h. Copy of all stack test results conducted during the permit term.

Reporting

Per NSPS Subpart Dc, the permittee is required to submit semiannual excess emissions and monitor performance reports.

All test reports for emissions testing must also be submitted.

Testing

The permittee must conduct an emissions test to demonstrate compliance with the pound per hour and grains per dry standard cubic foot emission limits contained in Condition IV.A.8 of the Title V permit on each primary control system stack once per permit term to show compliance with the hourly and concentration limits in the Title V operating permit. The initial test must be conducted within 180 days of the effective Title V permit date.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit GB - 40 MMBtu/hr Backup Thermal Oil Heater)

Limitations

Fuel burning emissions are expected from the operation of the backup thermal oil heater (GB). The backup thermal oil heater is limited to burning only natural gas and propane.

The opacity limit for the backup thermal oil heater is 20 percent except during one six minute period in any one hour when the opacity can be 30 percent.

Monitoring

The permittee is required to observe the backup thermal oil heater on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the backup thermal oil heater resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The permittee shall maintain records of the daily and yearly consumption by the energy system's backup thermal oil heater of natural gas in units of cubic feet, and propane in units of gallons. Each yearly consumption rate shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- b. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- c. Results of weekly or monthly opacity observations of the backup thermal oil heater (GB), along with details regarding any necessary corrective actions.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has

authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit BF - Blending and Forming)

Limitations

Particulate matter emissions are expected from the blending and forming operation (BF). The following emission limits apply:

Particulate Matter	0.01 gr/dscf	16.10 tons/yr
PM-10	0.01 gr/dscf	16.10 tons/yr

Particulate matter emissions from the blending and forming operation are controlled by the fabric filter (DC2B) for the resinated dust handling system. Visible emissions from the resinated dust handling system's fabric filter are not to exceed 5 percent opacity.

Monitoring

The permittee is required to monitor the differential pressure across the fabric filter (DC2B) that controls emissions from the blending and forming operation.

The permittee is required to observe the blending and forming operation on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the blending and forming equipment resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The yearly throughput of powdered resin, in units of tons per year, calculated monthly as the sum of each consecutive twelve (12) month period.
- b. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- c. Results of weekly or monthly opacity observations of the blending and forming operation (BF), along with details regarding any necessary corrective actions.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has

authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit P - Press)

Limitations

Particulate matter, nitrogen oxides, carbon monoxide, and VOC emissions are expected from the press (P). The following emission limits apply:

	<u>gr/dscf</u>	<u>lbs/hr</u>	<u>tons/yr</u>
Particulate Matter	0.003	---	12.8
PM-10	0.003	---	12.8
Nitrogen Oxides (as NO ₂)	---	8.01	35.1
Carbon Monoxide	---	10.55	46.2
Volatile Organic Compounds	---	5.23	22.9

Particulate matter and VOC emissions from the press are controlled by a regenerative thermal oxidizer (RTO #3). The combustion chamber temperature of RTO # 3 is required to be maintained at a minimum of 1500 °F. Visible emissions from RTO #3 are not to exceed 10 percent opacity.

The PM, CO, and VOC emissions from the press were successfully determined to be in compliance with the above limits by stack testing. NO_x emissions are based on a conservative vendor guaranteed emission factor, and the factor has been applied to the press operating at capacity.

Monitoring

The permittee is required to measure and record the combustion chamber temperature of RTO # 3.

The permittee is required to observe the press on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the press resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. Copies of combustion chamber temperature monitoring records for the RTO.
- b. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- c. Results of weekly or monthly opacity observations of the press (P), along with details regarding any necessary corrective actions.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit FSS - Finish Sawing and Sanding)

Limitations

Particulate matter emissions are expected from the finish sawing and sanding operation (FSS). The following emission limits apply:

Particulate Matter	0.01 gr/dscf	19.60 tons/yr
PM-10	0.01 gr/dscf	19.60 tons/yr

Particulate matter emissions from the finish sawing and sanding operation are to be controlled by a fabric filter (DC3C). Visible emissions from the operation of the finish sawing and sanding equipment are limited to 5 percent opacity.

Monitoring

The fabric filter is required to be equipped with a differential pressure indicator to continuously measure the differential pressure drop across the fabric filter.

The permittee is required to observe the finish sawing and sanding operation on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the finish sawing and sanding equipment resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- b. Results of weekly or monthly opacity observations of the finish sawing and sanding operation (FSS), along with details regarding any necessary corrective actions.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit DC4C - Unresinated Dust Handling System)

Limitations

Particulate matter emissions are expected from the unresinated dust handling system and these emissions are required to be controlled by a fabric filter (DC4C). The following emission limits apply:

Particulate Matter	0.01 gr/dscf	24.85 tons/yr
PM-10	0.01 gr/dscf	24.85 tons/yr

Visible emissions from the unresinated dust handling system (DC4C) are limited to 5 percent opacity.

Monitoring

The fabric filter is required to be equipped with a differential pressure indicator to continuously measure the differential pressure drop across the fabric filter.

The permittee is required to observe the unresinated dust handling system on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the unresinated dust handling system resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- b. Results of weekly or monthly opacity observations of the unresinated dust handling system (DC4C), along with details regarding any necessary corrective actions.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit SA2 - Six Head Sander)

Limitations

Particulate matter emissions are expected from the six head sander and these emissions are required to be controlled by a fabric filter (DC5). The following emission limits apply:

Particulate Matter	0.01 gr/dscf	17.4 tons/yr
PM-10	0.01 gr/dscf	14.8 tons/yr

Visible emissions from the six head sander's fabric filter (DC5) are limited to 5 percent opacity. Additionally, visible emissions from the six head sander material handling, load out, and storage shall not exceed 10 percent opacity.

Monitoring

The fabric filter is required to be equipped with a differential pressure indicator to continuously measure the differential pressure drop across the fabric filter.

The permittee is required to observe the six head sander on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the six head sander resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above.

The permittee is required to observe the six head sander material handling, load out, and storage on a weekly basis. The presence of visible emissions requires the permittee to take timely corrective action such that the six head sander material handling, load out, and storage resumes operation with no visible emissions or the permittee must conduct a visible emission evaluation (VEE) to assure the visible emissions are less than the opacity limit above. If there are no visible emissions for four consecutive weeks, then the monitoring frequency may be reduced to once per month.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The annual throughput of Oriented Strandboard through the six head sander (SA2), calculated monthly as the sum of each consecutive 12 month period.
- b. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.
- c. Results of weekly or monthly opacity observations of the six head sander (SA2), along with details regarding any necessary corrective actions.
- d. Results of weekly or monthly opacity observations of the six head sander (SA2), along with details regarding any necessary corrective actions.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission unit IA - Brand Name Logo and Nail Mark Application System)

Limitations

VOC emissions are expected from the operation of the brand name logo and nail mark application system (IA). The following emission limits apply:

Volatile Organic Compounds	5.08 lb/hr	22.3 tons/yr
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Visible emissions are limited to 5 percent opacity.

Monitoring

A monthly and annual material balance of VOC for inks and cleaners is considered adequate periodic monitoring to show compliance with VOC limits. This system consists of conveying equipment and a print bar which applies ink. The print bar is located approximately 1/8" above the face of the OSB sheet and ink is dripped onto the board face. Since the ink applicator is not a spray type, a negligible amount of particulate matter is expected and no weekly visible emission observation is required.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. A monthly and annual material balance of VOC (in tons) for the brand name logo and nail mark application system including inks and cleaners.
- b. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission units T2 (a-d) - Liquid Resin Storage Tanks)

Limitations

Formaldehyde emissions are expected from the operation of the liquid resin storage tanks. The following limits apply:

Formaldehyde	0.63 lbs/hr	0.03 tons/yr
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Formaldehyde emissions from the liquid resin storage tanks are required to be controlled by a 95 percent efficient carbon bed absorption system or equal.

The liquid resin storage tanks are subject to the following throughput limits:

- a. The annual throughput of the phenol formaldehyde liquid resin shall not exceed 7.52×10^6 gallons per year.
- b. The annual throughput of the MIDI liquid resin shall not exceed 2,300,000 gallons per year.

Monitoring

The construction permit for the facility requires that formaldehyde emissions from the liquid resin storage tanks be controlled by a carbon bed absorption system and limits formaldehyde emissions from these tanks. Even with a very conservative estimation of the uncontrolled emissions, the allowed emission level is quite small (ie., 0.03 tons per year). Therefore, the periodic monitoring requirement is considered satisfied by the phenol formaldehyde resin throughput and carbon bed replacement monitoring requirements included in the current Title V permit.

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- a. The yearly throughput of phenol formaldehyde liquid resin, in units of gallons per year, calculated monthly as the sum of each consecutive twelve (12) month period.
- b. The yearly throughput of MDI liquid resin, in units of gallons per year, calculated monthly as the sum of each consecutive twelve (12) month period.
- c. Records of actual carbon bed replacements, including but not limited to, date of replacement and quantity of material replaced.
- d. The origin and value of all emission factors for all pollutants relied upon for purposes of calculating actual emission rates and the equations used in these calculations.

Reporting

The permit has no reporting requirements specifically for this emissions unit.

Testing

The permit does not require source tests for this emission unit. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

EMISSION UNIT APPLICABLE REQUIREMENTS (emission units (2) wax tanks, (1) thermal oil tank, and (1) hydraulic oil 68 tank)

Recordkeeping

The permittee shall keep records as required by Condition XIII.A.1 of the Title V permit.

EMISSION UNIT APPLICABLE REQUIREMENTS (Facility Wide)

Limitations

The permittee is limited to producing 59,600 square feet per hour and 522 million square feet per year of OSB based on a panel thickness of 3/8 inches. Visible emissions from fugitive sources are limited to 10 percent opacity. Unless otherwise specified in the permit, non-fugitive sources of emissions are limited to 20 percent opacity except for a six minute period in any one hour when the opacity may not exceed 30 percent.

The original permit application and subsequent 1/5/94 preconstruction permit for the greenfield facility grouped the three fabric filters at the facility together for (a) air pollution control equipment requirements, (b) allowable opacity, and (c) emission limit purposes. The current Title V permit application and the draft Title V permit group the site equipment together based on manufacturing process steps.

Furthermore, the 1/5/94 permit limited the PM and PM10 emissions to 0.01 grains per dry standard cubic foot for each of the three fabric filters. It also limited the annual emissions to 60.55 tons per year for both of these pollutants. The annual limit was a combined limit for all three fabric filters.

Based on the "Exit gas parameters" listed in the Title V permit application and the calculations for the 1/5/94 permit (copy attached), the current Title V permit segregates the combined annual emission limit as follows:

Fabric Filter ID	Process Area	Tons/yr
DC2B	Blending and Forming area	16.10
DC3C	Finish Sawing and Sanding area	19.60
DC4C	Unresinated Dust Handling System	24.85
SUM =		60.55

Recordkeeping

The permit includes requirements for maintaining records. These records include:

- The hourly production of finished Oriented Strandboard, in units of square feet per hour. The rated square footage shall be based on a panel thickness of 3/8 inches.
- The yearly production of finished Oriented Strandboard, in units of square feet per year, calculated monthly as the sum of each consecutive twelve (12) month period. The rated square footage shall be based on a panel thickness of 3/8 inches.
- Annual hours of operation of the gasoline air compressor engine (Ref. No. 64), the gasoline pressure washer engine (Ref. No. 65), the diesel generator engine (Ref. No. 66), and the diesel fire pump engine (Ref. No. 67), each calculated monthly as the sum of each consecutive 12 month period.

Testing

The permit does not specifically require facility wide testing. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by ?? 2.1-20.01:2 and ' ? 10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

U. Failure/Malfunction Reporting

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

STATE ONLY APPLICABLE REQUIREMENTS

None

POTENTIAL FUTURE APPLICABLE REQUIREMENTS

J. M. Huber Corporation - Crystal Hill, VA has indicated through 112(j) notifications that they will be subject to the following MACTs upon promulgation: DDDD, DDDDD, QQQQ, HHHHH, and ZZZZ. However, with regard to MACT ZZZZ, the facility currently does not have any reciprocating engines.

STREAMLINED REQUIREMENTS

The 40 MMBtu/hr wood fired thermal oil heat exchanger that is used with the energy system (ES) is subject to the requirements of NSPS Subpart Dc. Under NSPS Subpart Dc, the source standard for particulate matter is 0.1 gr/dscf. However, the particulate matter emission limit determined by applying BACT is 0.03 gr/dscf, and this limit was carried forward into the Title V permit. If the permittee is in compliance with the emission limit derived from the application of BACT, they will automatically be in compliance with the particulate matter emission limit in NSPS Subpart Dc.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation ¹	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
1	Electrical A/C Heater Units	9 VAC 5-80-720 A	---	---
2	One (1) 1.26 MMBtu/hr Gas Fired Boiler	9 VAC 5-80-720 C	Natural Gas Combustion	1.26
3	Air Contaminant Detectors	9 VAC 5-80-720 A	---	---
4	Air Dryers	9 VAC 5-80-720 A	---	---
5	Bathroom Maintenance	9 VAC 5-80-720 A	---	---
6	Batteries	9 VAC 5-80-720 A	---	---
7	Battery Chargers	9 VAC 5-80-720 A	---	---
8	Blow Down for Cleaning Purposes	9 VAC 5-80-720 A	---	---
9	Blueprint Copier	9 VAC 5-80-720 A	---	---
10	Copiers	9 VAC 5-80-720 A	---	---
11	Crane Track Maintenance	9 VAC 5-80-720 A	---	---
12	Defoamer	9 VAC 5-80-720 A	---	---
13	Diesel Storage Tanks (for on-site vehicles and equipment)	9 VAC 5-80-720 A	VOC	---
14	Dumpsters	9 VAC 5-80-720 A	---	---
15	Edge Seal and Stencil Paint Totes	9 VAC 5-80-720 A	VOC	---
16	Electric Welders	9 VAC 5-80-720 A	---	---
17	Emergency Exit Lights with Battery	9 VAC 5-80-720 A	---	---
18	Emergency Lights with Battery	9 VAC 5-80-720 A	---	---
19	Exhaust Fans	9 VAC 5-80-720 A	---	---
20	Exhaust Vents	9 VAC 5-80-720 A	---	---

Emission Unit No.	Emission Unit Description	Citation ¹	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
21	Forklifts - Propane Fired	9 VAC 5-80-720 A	---	---
22	Gas and Diesel Fired Welders	9 VAC 5-80-720 C	Natural Gas and Diesel Combustion	---
23	Gear Boxes	9 VAC 5-80-720 A	---	---
24	Golf Carts	9 VAC 5-80-720 A	---	---
25	Grinders	9 VAC 5-80-720 A	PM	---
26	Hydraulic Units	9 VAC 5-80-720 A	---	---
27	Loaders	9 VAC 5-80-720 A	---	---
28	Manlifts	9 VAC 5-80-720 A	---	---
29	Natural Gas Space Heaters	9 VAC 5-80-720 A	Natural Gas Combustion	---
30	Natural Gas Regulator Vents	9 VAC 5-80-720 A	VOC	---
31	Paint Booths	9 VAC 5-80-720 A	---	---
32	Paint Sprayers	9 VAC 5-80-720 A	VOC	---
33	Parts Washer (water based)	9 VAC 5-80-720 A	---	---
34	Pens	9 VAC 5-80-720 A	---	---
35	Pneumatic Cylinders	9 VAC 5-80-720 A	---	---
36	Pneumatic Hand Tools	9 VAC 5-80-720 A	---	---
37	Pneumatic Valves	9 VAC 5-80-720 A	---	---
38	Portable Heaters - Comfort Heaters	9 VAC 5-80-720 A	---	---
39	Pressure Washers	9 VAC 5-80-720 C	Gasoline Combustion	Less than 7 hp, each
40	Printers	9 VAC 5-80-720 A	---	---
41	Propane Filling Systems	9 VAC 5-80-720 A	VOC	---

Emission Unit No.	Emission Unit Description	Citation ¹	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
42	Propane Natural Gas Mixing Regulators - Vented	9 VAC 5-80-720 A	VOC	---
43	Propane Natural Gas Mixing Station	9 VAC 5-80-720 A	VOC	---
44	Propane Regulators	9 VAC 5-80-720 A	VOC	---
45	Radio Batteries	9 VAC 5-80-720 A	---	---
46	Raw Water Treatment	9 VAC 5-80-720 A	---	---
47	Release Agents Totes	9 VAC 5-80-720 A	---	---
48	Road Flares - Cases	9 VAC 5-80-720 A	---	---
49	Sand Blaster	9 VAC 5-80-720 A	PM	---
50	Sewer Line Vents	9 VAC 5-80-720 A	---	---
51	Shop Presses	9 VAC 5-80-720 A	---	---
52	Solvent Storage Cabinets	9 VAC 5-80-720 A	VOC	---
53	Steam Cleaners	9 VAC 5-80-720 A	---	---
54	Test Ports	9 VAC 5-80-720 A	---	---
55	Torches	9 VAC 5-80-720 A	---	---
56	Tractor	9 VAC 5-80-720 A	---	---
57	Vehicles	9 VAC 5-80-720 A	---	---
58	Water Filtration Systems	9 VAC 5-80-720 A	---	---
59	Water Tanks	9 VAC 5-80-720 A	---	---
60	Wax Tanks	9 VAC 5-80-720 A	---	300 gallons
61	WESP - Flush Tanks	9 VAC 5-80-720 A	---	---
62	WESP - Recycling Tanks	9 VAC 5-80-720 A	---	---

Emission Unit No.	Emission Unit Description	Citation ¹	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
63	WESP Settling Ponds	9 VAC 5-80-720 A	---	---
64	11 hp Gasoline Air Compressor Engine (See Note 1)	9 VAC 5-80-720 B	Gasoline Combustion	11 hp
65	18 hp Gasoline Pressure Washer Engine (See Note 2)	9 VAC 5-80-720 B	Gasoline Combustion	18
66	749 hp Diesel Generator Engine (See Note 3)	9 VAC 5-80-720 B	Diesel Fuel Combustion	749 hp
67	208 hp Diesel Fire Pump Engine (See Note 4)	9 VAC 5-80-720 B	Diesel Fuel Combustion	208 hp

Note 1 - The 11 hp gasoline air compressor engine (Ref. No. 64) shall not operate more than 2,000 hours per year, calculated monthly as the sum of each consecutive 12 month period.

Note 2 - The 18 hp gasoline pressure washer engine (Ref. No. 65) shall not operate more than 1,200 hours per year, calculated monthly as the sum of each consecutive 12 month period.

Note 3 - The 749 hp diesel generator engine (Ref. No. 66) shall not operate more than 400 hours per year, calculated monthly as the sum of each consecutive 12 month period.

Note 4 - The 208 hp diesel fire pump engine (Ref. No. 67) shall not operate more than 1,500 hours per year, calculated monthly as the sum of each consecutive 12 month period.

¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

No portion of the Title V permit application was identified as confidential.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under ' 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under ' 112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either ' 504(b) or ' 114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under ' 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under ' 183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under ' 129 of the

Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based.

REQUEST FOR VARIANCES OR ALTERNATIVES:

None

COMMENT PERIOD:

The public notice appeared in the South Boston Gazette-Virginian on March 5, 2003.

Beginning Date: March 5, 2003

Ending Date: April 5, 2003

All written comments should be addressed to the following individual and office:

Matthew D. Biesterveld, P. E.
Senior Environmental Engineer
Virginia Department of Environmental Quality
South Central Regional Office
7705 Timberlake Road
Lynchburg, VA 24502
Phone: (434) 582-5120 Fax: (434) 582-5125
mdbiesterv@deq.state.va.us

PROCEDURE FOR REQUESTING PUBLIC HEARING:

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing to the above address and shall state the nature of the issues proposed to be raised in the hearing. The Director shall grant such a request for a hearing if he concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

**COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
South Central Regional Office**

STATEMENT OF LEGAL AND FACTUAL BASIS

Addendum to the May 22, 2003 Statement of Legal and Factual Basis

Huber Engineered Woods, LLC
Crystal Hill (Halifax County), Virginia
Permit No. VA-30905

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Huber Engineered Woods, LLC has applied for a significant modification to their Title V Operating Permit for its Crystal Hill, Virginia facility. The Department has reviewed the application and has prepared a draft significant modification for the Title V Operating Permit.

Engineer/Permit Contact: **DRAFT and PROPOSED**

Date:

Air Permit Manager: _____

Date:

Regional Director: _____

Date:

1. FACILITY INFORMATION

Permittee

Huber Engineered Woods, LLC
Route 3, Highway 626
Crystal Hill, VA 24539

Facility

Huber Engineered Woods, LLC
Route 3, Highway 626
Crystal Hill, VA 24539

AIRS ID No. 51-083-00050

2. SOURCE DESCRIPTION

SIC Code: 2493 – The facility manufactures a reconstituted wood product known as oriented strandboard (OSB).

3. SIGNIFICANT PERMIT MODIFICATION INFORMATION

This significant permit modification is being generated to incorporate the changes to Huber's New Source Performance Standards Permit dated 8/15/97, as amended 5/14/98, 1/12/00, 12/2/03, and 1/22/04 (hereafter referred to as the NSR permit dated 8/15/97, as amended). The NSR permit dated 8/15/97, as amended, is undergoing a significant permit amendment which includes definition of rated capacity for two process equipment groups, adjustment of emission and throughput limits, refinement of parametric monitoring requirements, clarification of work practices, and updating of wording and regulatory citations to current standards. The significant NSR permit amendment is undergoing concurrent public participation with this significant modification of the Title V permit.

Also included in this significant Title V permit modification, are Compliance Assurance Monitoring (CAM) requirements for Carbon Monoxide (CO) emissions for the Energy System and Dryers (ES&D), relevant applicable requirements for the Crystal Hill facility from the National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products (PCWP MACT or PCWP), and relevant applicable requirements from Huber's Supplemental Environmental Project (SEP).

Finally, this significant Title V permit modification updates the applicable requirements to match the current Title V permit boilerplate language and condition sequence.

4. COMPLIANCE STATUS

For Title V permitting purposes, discussion of the compliance status is considered relevant to determining whether a compliance plan must be included in the Title V permit. Based on compliance evaluations, it is alleged that the facility has been in violation of several state or federal applicable requirements in their NSR permit dated 8/15/97, as amended. However, generally, Huber has agreed in principle to comply with the applicable requirements of the NSR permit dated 8/15/97, as amended, but they have also submitted an NSR permit application requesting reevaluation of selected limits in the NSR permit. The significant NSR permit amendment that is being processed concurrently with this significant Title V permit modification is the result of the requested reevaluation. Therefore, as of the signature date of the significant NSR amendment, which will not occur before the signature date of the significant Title V modification, the noncompliance status of the facility will be resolved and no compliance plan will be required in the current significant Title V permit modification.

5. EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Generally, the emission units and control devices at Crystal Hill remain as described in the Statement of Basis dated 5/22/03. However, the significant NSR permit amendment does alter equipment at the site as follows:

- The number of rotary blenders is reduced from four to three.
- One paint booth is added. Note: The paint booths at the facility have been deemed insignificant activities. (See Insignificant activities list in the Statement of Basis; Emission Unit No. 31.)
- A 4-head sander was included in the Finish, Sawing, and Sanding area in the 8/15/97 NSR permit, as amended. The 4-head sander has been removed and its function has been replaced by a 6-head sander. The 6-head sander has its own standalone NSR permit dated 1/23/02, as amended 1/22/04.
- A 2,200 gallon used oil storage tank is added to the list of above ground storage tanks at the facility. This tank is considered an insignificant activity based on emission rate (ie., less than 5 tons per year of VOC).

6. EMISSION UNIT APPLICABLE REQUIREMENTS REVISIONS

6.1 General

Since the New Source Performance Standards Permit, dated 8/15/97, as amended, is undergoing concurrent review with the Title V permit, the date of the NSR permit is not yet known. When this date

is set, it will replace the placeholder language in the current DRAFT and PROPOSED Title V permit.

6.2 Wood Yard (WY)

Consistent with the draft NSR permit, due to the size and nature of the wood yard operations, it is considered difficult, if possible at all, and prohibitively expensive (e.g., temporary total enclosure) to test the short term emission rate for the wood yard. Furthermore, Huber is not currently on the list of source categories for which fugitive emissions need to be included in determining PSD major status. Therefore, the wood yard emission limits have been removed as requested by Huber. In their place, the general site applicable requirement for visible emissions from fugitive sources (ie., 10% opacity), is reiterated specifically for the wood yard.

6.3 Energy System and Dryers (ES & D)

6.3.1. Consistent with the draft NSR permit, and as discussed below, the control efficiency for particulate matter is no longer limited.

Beginning with the permit for the greenfield facility, a control efficiency for PM has been included in the permit. Recall that at the time of processing the greenfield permit application, RTO application to the wood products industry was just beginning, and little or no information on actual performance was documented. Therefore, the BACT level of performance, based on a combination of vendor guaranteed performance and the then current national consent order for Louisiana Pacific OSB, was set at 91% for particulate. Based on results of March 2003 testing at Crystal Hill the PM efficiency was met or exceeded (ie., Filterable PM (Method 5) greater than 93%, and condensable PM (Method 202) greater than 91%). Therefore, consistent with current practice which recognizes the cumbersome nature of verification of control efficiency, the BACT level of performance is considered set by the emissions limits and PM control efficiency was removed from the current draft NSR permit.

6.3.2 Consistent with the draft NSR permit, the control efficiency for VOC is increased from 94% to 96.0%.

6.3.3 Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), the throughput of oven dried flakes is increased from 433,960 to 455,520 oven dry tons of flakes per year.

6.3.4 Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), the emission limits for the

ES&D are adjusted based on stack testing performed on Huber's system at Crystal Hill, and on the increased throughput of oven dried flakes.

Streamlined requirement: The energy system is subject to the NSPS Subpart Dc standard for PM which is 0.1 lb/MMBtu. Compliance with the PM emissions in the Title V permit, which are based on BACT (ie., 0.04 lb/MMBtu) , ensures compliance with the NSPS standard. Both BACT and NSPS regulatory citations are included in the Title V permit. The energy system would be considered in compliance with the NSPS standard until the emissions exceeded 0.1 lb/MMBtu.

- 6.3.5 The additional limitations, monitoring requirements, recordkeeping requirements, reporting requirements, and testing requirements derived from the PCWP MACT are housed in section **XIII** of the Title V permit, and are cross referenced for the ES&D.
- 6.3.6 Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), the WESP operating parameters to be monitored are revised.
- 6.3.7 Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), installation and operation of a Parameter Monitoring System (PMS) is required to track emission trends of CO from the ES&D. Recordkeeping requirements for the PMS are also specified.

6.4 Backup Thermal Oil Heater (GB)

Except for coordination of regulatory citations, the applicable requirements for the Backup Thermal Oil Heater are not being revised.

6.5 Blending and Forming (BF)

Except for coordination of regulatory citations and updating Title V boilerplate language, the applicable requirements for Blending and Forming are not being revised.

6.6 Press (P)

- 6.6.1. Consistent with the draft NSR permit, the capture requirement for Press emissions is more clearly defined.
- 6.6.2. Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), a throughput limit of oven

dried flakes is added for the Press. Recordkeeping to support compliance assessment with this limit is also added.

- 6.6.3. Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), the emission limits for the Press are adjusted based on stack testing performed on Huber's system at Crystal Hill, and on the throughput of oven dried flakes.
- 6.6.4. The additional limitations, monitoring requirements, recordkeeping requirements, reporting requirements, and testing requirements derived from the PCWP MACT are housed in section XIII of the Title V permit, and are cross referenced for the Press.

6.7 Finish Sawing and Sanding (FSS)

Except for coordination of regulatory citations and updating Title V boilerplate language, the applicable requirements for Finish Sawing and Sanding are not being revised.

6.8 Unresinated Dust Handling System

Except for coordination of regulatory citations and updating Title V boilerplate language, the applicable requirements for Unresinated Dust Handling System are not being revised.

6.9 Six Head Sander (SA)

The applicable requirements for the Six Head Sander are not being revised.

6.10 Brand Name Logo and Nail Mark Application System (IA)

The additional limitations, monitoring requirements, recordkeeping requirements, reporting requirements, and testing requirements derived from the PCWP MACT are housed in section XIII of the Title V permit, and are cross referenced for the Brand Name Logo and Nail Mark Application System (IA). There are no other revisions to the applicable requirements for this system.

6.11 Liquid Resin Storage Tanks (T2a, T2b, T2c, and T2d)

Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), due to the promulgation of the PCWP MACT, the requirement to control emissions from the liquid resin storage tanks, and the emission limits for these tanks are removed.

6.12 Process Tanks (T1a, T1b (wax), T3 (thermal oil), and T4 (hydraulic oil))

Consistent with the draft NSR permit, and as discussed in the engineering review for the concurrent NSR significant amendment (see Attachment 1 below), due do changes in the NSPS, only the wax

tanks are currently subject to the requirements of NSPS Subpart Kb.

7. PLYWOOD AND COMPOSITE WOOD PRODUCTS (PCWP) MACT REQUIREMENTS (40 CFR 63 SUBPART DDDD)

On 7/30/04, the Plywood and Composite Wood Products (PCWP) MACT (ie., 40 CFR 63 Subpart DDDD) was promulgated. The applicable requirements from the MACT for Huber's Crystal Hill facility have been included in the current significant modification of the Title V permit. These applicable requirements are grouped in section XIII of the permit, and related to specific process units by cross reference.

8. COMPLIANCE ASSURANCE MONITORING (CAM)

In accordance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM), the ES&D is a large pollutant-specific emissions unit (large PSEU) for carbon monoxide emissions. For large PSEUs, the permittee is required to submit a CAM plan with the permit application for a significant Title V permit revision if the permit revision is applicable to the large PSEU (See 40 CFR 64.5 (a)(2)). However in accordance with 40 CFR 64.4(e), if the monitoring submitted by the permittee requires installation, or testing prior to use of the monitoring for the purposes of CAM, the permittee may include an "implementation plan" which is an enforceable schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring. In no case may the duration of the schedule exceed 180 days after the approval of the permit.

At Crystal Hill, Huber will be using the PMS required as described in section 6.3.7 above as their compliance assurance monitor for CO from the ES&D. The installation and testing of the PMS has not yet taken place. Therefore, the current significant Title V permit modification includes a CAM implementation plan. After the approval of the CAM plan based on site specific testing, the Title V permit will be reopened for inclusion of the approved plan.

9. SUPPLEMENT ENVIRONMENTAL PROJECT SCHEDULE

On 9/17/04 a Consent Order between The Virginia Department of Environmental Quality and Huber was signed. As part of that Consent Order, Huber has committed to a Supplemental Environmental Project (SEP). The SEP is comprised of three parts: Installation and operation of a Centrifuge project, a trial WESP Up-grade Project, and a Swing RTO Project. In accordance with 9 VAC 5 Chapter 80, Part II, Article 1 (ie., Title V permit regulations), "applicable federal requirements" include any source-specific provisions such as consent orders. Therefore, the requirements of the SEP are included by attachment in this significant modification to the Title V permit.

10. GENERAL CONDITIONS

The General Conditions have been adjusted to comply with the current boilerplate.

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

11. CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

12. PUBLIC PARTICIPATION

The public notice for this Draft and Proposed significant modification to the Title V permit appeared in the South Boston Gazette-Virginian on 9/24/04.

Public comment permit beginning date: 9/25/04
Public comment permit ending Date: 10/25/04

All written comments should be addressed to the following individual and office:

Thomas H. Berkeley, PE
Senior Environmental Engineer
Virginia Department of Environmental Quality
South Central Regional Office
7705 Timberlake Road
Lynchburg, VA 24502
Phone: (434) 582-5120 ext. 6005
Fax: (434) 582-5125
thberkeley@deq.virginia.gov

Attachments

1. Text of the INTRA-AGENCY MEMORANDUM dated 8/17/04 (filename: 309905.Etb_8_CLEAN)